

Application No. 10/686,968

NANS 1001-2

REMARKS

In the Official Action mailed 4 February 2005, the Examiner reviewed claims 6 and 9-39. The Examiner has rejected claims 9, 23 and 39 under 35 U.S.C. §102(e); has rejected claims 9, 16, 22, 23, 30, 35, 36 and 39 under 35 U.S.C. §102(e); has allowed claim 6, and has objected to claims 10-15, 17-21, 24-29, 31-34, 37 and 38.

Applicant has amended claims 9, 12-15, 17-21, 23-34, 37 and 38, and canceled claims 10 and 22. Claims 6, 9, and 11-21 and 23-39 remain pending.

The Examiner's rejections are respectfully traversed below.

Rejection of Claims 9, 23 and 39 under 35 U.S.C. §102(e)

Claims 9, 23 and 39 are rejected under 35 U.S.C. §102(e) as being anticipated by Hanink et al. (USPN 3156978).

Applicant has amended claim 9 to incorporate the subject matter of claim 10, and canceled claim 10, which the Examiner indicated would be allowable. Claim 23 is amended to clarify that the second immersing step is executed with the adhering salt on the surface of the component.

With respect to claim 23 as clarified, reconsideration is requested. The Examiner cites column 2, lines 31-57 as teaching the first immersing step, and relies on column 3, lines 38-67 to suggest the immersion in molten solder. The Examiner cites column 4, lines 54-68 to teach a following immersion in molten Al solder. However, the Examiner has apparently made a mistake. In claim 23, the second immersing step uses a molten salt for electrolytic replacement plating of the component. In Hanink et al., the second immersing step is molten metal.

Therefore, Hanink et al. does not anticipate claim 23. Claim 39 depends from claim 23, and is not anticipated for the same reasons.

Accordingly, reconsideration of the rejection of claims 9, 23 and 39 as amended is respectfully requested.

Rejection of claims 9, 16, 22, 23, 30, 35, 36 and 39 under 35 U.S.C. §102(e)

Claims 9, 16, 22, 23, 30, 35, 36 and 39 are rejected under 35 U.S.C. §102(e) as being anticipated by Steinberg (USPN 2833679).

Application No. 10/686,968

NANS 1001-2

As mentioned above, claim 9 has been amended to incorporate the subject matter of claim 10. Claim 16 depends from claim 9 as amended, and is therefore allowable for the same reasons. Claim 22 is canceled.

Also, claim 23 has been amended to clarify that the second immersing step is executed with the adhering salt on the surface of the component. With respect to claim 23 as clarified, reconsideration is requested. Steinberg applies electrolytic replacement using a molten salt as a solvent to plate a component. However, Steinberg does not suggest the method recited in claim 23, which includes the use of first and second molten salts in respective first and second immersing steps, wherein the second salt causes an electrolytic replacement plating of the component, and wherein the solidified first molten salt is adhering to the component at the second immersing step.

The Examiner cites column 1, lines 25-45, and column 2, lines 35-71, as suggesting the first immersing step of claim 23. The first citation describes the prior art layered bath technique. The second citation describes the salts used in the electrolytic replacement plating that Steinberg claimed to invent. The prior art layered bath and the electrolytic replacement salt bath procedures described in Steinberg are not linked. Rather, the procedures are alternative techniques to plate aluminum. Steinberg also describes a third technique which uses the electrolytic replacement "supernatant molten flux" in a layered bath over a molten metal. (See, column 3, lines 35-72).

The Examiner cites column 3, lines 45-57 and column 1, lines 33-35 to suggest a "second bath of molten Sn solder", and bonding to other components. However, claim 23 requires a second bath of molten salt, rather than molten metal. Accordingly, Applicant submits that Steinberg does not suggest use of a molten salt immersion, followed by another molten salt immersion, as required in claim 23. Therefore, the Examiner's *prima facie* case is apparently based on a mistake in the reading of claim 23.

Claims 30, 35, 36 and 39 depend from claim 23, as amended, and are allowable for the same reasons.

Accordingly, reconsideration of the rejection of claims 9, 16, 22, 23, 30, 35, 36 and 39 as amended is respectfully requested.

Application No. 10/686,968

NANS 1001-2

Allowable Subject Matter

Claim 6 is allowed. Such claim is not amended.

Claims 10-15, 17-21, 24-29, 31-34, 37 and 38 have been objected to by the Examiner for being dependent upon a rejected base claim.

Applicant has canceled claim 10, and incorporated its subject matter into claim 9. Claims 12, 15, 17-21 have been amended as suggested by the Examiner to incorporate the limitations of their respective base claims. Claim 13 is amended to depend from claim 12, as amended. Claim 14 is amended to depend from claim 15, as amended.

Applicant has amended claims 24, 25, 29, 30, 32, 34, 37 and 38 as suggested by the Examiner to incorporate the limitations of their respective base claims.

Claim 24 has also been clarified to make it explicit that the mixture is eutectic or near-eutectic, as would be understood by persons of skill in this art.

Claims 26 and 28 have been amended to depend from claim 24, as amended. Claim 27 has been amended to depend from claim 25, as amended. Claims 31 and 33 have been amended to depend from claim 34, as amended.

The Examiner's attention is drawn to the broadening amendments of claims 12 and 25, extending them to read on mixtures of hydroxides, in addition to the essentially pure hydroxides of the original claims. Such mixtures are supported by the original specification at page 9, paragraph [0041], and throughout.

Accordingly, reconsideration of the objection to claims 11-15, 17-21, 24-29, 31-34, 37 and 38, as amended, is respectfully requested.

///

Application No. 10/686,968

NANS 1001-2

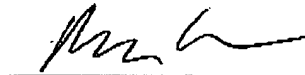
CONCLUSION

It is respectfully submitted that this application is now in condition for allowance, and such action is requested.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (NANS 1001-2).

Respectfully submitted,

Dated: 24 May 2005



Mark A. Haynes, Reg. No. 30,846

HAYNES BEFFEL & WOLFELD LLP
P.O. Box 366
Half Moon Bay, CA 94019
(650) 712-0340 phone
(650) 712-0263 fax